

Amendments to the Claims:

Please cancel claims 1-14 as presented in the underlying International Application No. PCT/EP2003/007054 and add new claims 15-32 as shown in the listing of claims.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-14 (canceled).

Claim 15 (new): A carrier device for a biological preparation cuttable by laser microdissection, the carrier device comprising:

a frame-like holder having a substantial form of a petri dish with an opening at a bottom thereof; and

a laser light-absorbing film disposed on the frame-like holder so as to cover the opening.

Claim 16 (new): The carrier device as recited in claim 1 wherein the opening is coextensive with an entire bottom of the petri dish form so that the laser light-absorbing film forms the entire bottom.

Claim 17 (new): The carrier device as recited in claim 1 wherein the laser light-absorbing film includes a polyethylene naphthalate film.

Claim 18 (new): The carrier device as recited in claim 17 wherein the polyethylene naphthalate film has a thickness of 1.35 μm or 2.5 μm .

Claim 19 (new): The carrier device as recited in claim 1 wherein the laser light-absorbing film is weldedly attached to the frame-like holder.

Claim 20 (new): The carrier device as recited in claim 1 wherein the laser light-absorbing film is adhesively bonded to the frame-like holder.

Claim 21 (new): The carrier device as recited in claim 20 wherein the frame-like holder includes a cylindrical wall and further comprising an adhesive film having a form of a template so that the adhesive film is bonded on a first side to the cylindrical wall and on a second side to the laser light-absorbing film.

Claim 22 (new): The carrier device as recited in claim 1 wherein the frame-like holder includes a cylindrical wall and ring-shaped holding member having the laser-cuttable film adhesively or weldedly bonded thereto, the ring-shaped holding member having a diameter matched to the cylindrical wall and including a snap-in groove configured to snapably receive the cylindrical wall in a liquid-tight releasable manner.

Claim 23 (new): The carrier device as recited in claim 1 wherein the laser light-absorbing film is hydrophilic.

Claim 24 (new): The carrier device as recited in claim 1 wherein the laser light-absorbing film is configured to receive a nutrient medium for cell culture.

Claim 25 (new): The carrier device as recited in claim 24 wherein the nutrient medium includes a nutrient liquid.

Claim 26 (new): The carrier device as recited in claim 24 wherein the nutrient medium includes a nutrient gel.

Claim 27 (new): A method for laser microdissection of living biological cell cultures using

a laser microdissection device, the method comprising:

providing a frame-like holder having a substantial form of a petri dish with an opening at a bottom thereof;

disposing a laser light-absorbing film on the frame-like holder so as to cover the opening;
and

disposing a biological preparation including a living biological cell culture on the laser light-absorbing film; and

directing a cutting, focused laser beam through an objective onto the biological preparation so as to encircle a region of interest of the preparation by a complete cut line and separate the region of interest from a surrounding area of the preparation.

Claim 28 (new): The method as recited in claim 27 wherein the directing is performed so as to direct the laser beam through the objective onto the biological preparation from above the biological preparation.

Claim 29 (new): The method as recited in claim 27 wherein at least a portion of the laser light-absorbing film is freely suspended.

Claim 30 (new): A method for separating a preparation region of interest from a living biological preparation, the method comprising:

providing a frame-like holder having a substantial form of a petri dish with an opening at a bottom thereof;

disposing a laser light-absorbing film on the frame-like holder so as to cover the opening;

disposing a biological preparation on the laser light-absorbing film; and

cutting out a preparation region of interest of the biological preparation by a laser beam forming a cut line so that the preparation region of interest falls into a collection container disposed underneath the biological preparation.

Claim 31 (new): The method as recited in claim 30 wherein at least a portion of the laser light-absorbing film is freely suspended.

Claim 32 (new): The method as recited in claim 15 wherein at least a portion of the laser light-absorbing film is freely suspended.